DISSERTATION

FOR THE AWARD OF DEGREE

MASTER OF SCIENCE

SESSION 2022-2024

INTERNET ADDICTION AND ITS RELATION TO PSYCHOPATHOLOGY AND SELF-ESTEEM AMONG MEDICAL STUDENTS

BY

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ACKNOWLEDGEMENT

With utmost respect and gratitude, I would like to sincerely thank my guide, Dr. Niharika Arora, Assistant Professor, Department of Clinical Psychology, for her constructive suggestions, valuable and insightful guidance, and constant encouragement throughout every step of this challenging process. Her support has been instrumental in the successful completion of my research work. Ma'am, I thank you for being the wonderful person and professor that you are.

I am also grateful to my co-guide, Dr. Parul Gairola, Assistant Professor, Department of Clinical Psychology, for her advice, assistance and expertise during this research. Her knowledge and contributions have substantially increased the depth and scope of this thesis.

I would like to express my heartfelt gratitude to Dr. Rani Srivastava, Head of Department, Department of Clinical Psychology, for her constant support, direction and guidance during the course of this thesis. Her insight and commitment to academic success have significantly shaped my academic experience.

I warmly thank Ms. Anita Tyagi and Ms. Neha Kushwaha for their assistance and support. I would also like to thank the Department of Clinical Psychology for providing me with all the necessary resources and a favorable environment to conduct this research.

I am deeply grateful to all the participants who have been an instrumental part of this dissertation and those who opened their hearts and minds to me as I pursued my research. I am thankful for their kindness, honesty, invaluable insights and all the support they provided.

This acknowledgment would be incomplete without thanking my batchmates, friends and family, who acted as my pillars in times of need and uncertainty. They created a warm and encouraging

environment that was crucial for the completion of this work. I owe all my friends a huge thank you for providing a much-needed supportive environment in times of great stress.

Finally, I would like to extend my gratitude to anyone else who has contributed, directly or indirectly, to this thesis. Your support and encouragement have been invaluable.

SHILPA

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LIST OF ABBREVIATIONS

S.NO.	ABBREVIATIONS	FULL WORD
1.	IAD	Internet Addiction Disorder
2.	PIU	Problematic Internet Use
3.	IA	Internet Addiction
4.	WHO	World Health Organization
5.	IAMAI	Internet and Mobile Association of India
6.	IMRB	Indian Market Research Bureau
7.	DSM-5 TR	Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, Text Revision
8.	MDD	Major Depressive Disorder
9.	APA	American Psychiatric Association
10.	IAT	Internet Addiction Test
11.	YIAT	Young Internet Addiction Test
12.	DASS-42	Depression Anxiety Stress Scale
13.	RSES	Rosenberg Self-Esteem Scale
14.	SD	Standard Deviation

INTRODUCTION

INTRODUCTION

Within a vast universe with millions of computers, webpages, servers and websites, there's something connecting them all—it's called the Internet[1]. See it as a massive web in which all entities are able to communicate with one another. The internet is like a special highway for computers and electronic gadgets to share and find information. Imagine your device is like a secret key—when it's online, you can unlock a world of apps, websites, social media and many other things. The internet is now the best option if you want to communicate with people or obtain information rapidly. But here's the thing: some people can become so hooked on the internet that it affects other parts of their lives like relationships, jobs or even their health. They seem to be unable to quit spending so much time online, which is causing problems. They become addicted to surfing the internet, constantly requiring more time to achieve the same "high." It's like an online adventure that never ends!

The use of the internet has increased significantly over the last ten years globally. It is prevalent as ten years ago, using the internet was mostly about sitting at a computer and checking emails or looking up information. Back then, we were just starting to use social media on our computers, but they were mainly used for basic communication and sharing updates. Common activities included checking emails, browsing websites and conducting basic research. Online interactions then were largely stationary and mobile devices were not as widespread or powerful as they are today. Internet speed and connectivity were not as advanced, resulting in slower loading times and a less seamless online experience. But now, things have truly turned around! All of us have smart cell phones and 5G offers incredibly fast internet. The internet has become ubiquitous, adding excitement to our lives and making communication more than just talking or texting. We have access to games, educational resources and cutting-edge technology like virtual reality. We may purchase goods, watch movies or learn online thanks

to social media's increased popularity. The internet has grown into this enormous, incredible realm that plays a major role in our daily lives.

In the current digital age, the internet has developed into a useful tool for all people, providing access to information, news, financial services, academic materials, entertainment and interpersonal interactions, among other things[2]. The internet has also become a vital resource for students, offering a wealth of information at their fingertips. On the positive side, students can easily access educational materials, research articles, and online courses to enhance their learning. It provides a platform for collaboration, allowing students to connect with peers and educators globally. Additionally, medical students find it exceptionally valuable due to its affordability and quick access to information from different sources[3,4]. They can access loads of medical journals, research papers and online resources to deepen their understanding of complex topics. It helps them stay updated on the latest medical breakthroughs and connects them with fellow students and experts in the field. They also need to be cautious about misinformation and make sure they are using reliable sources to enhance their medical knowledge. However, there are potential downsides as well. The internet can be a distraction with social media, online games, watching explicit stuff and other non-educational content competing for attention[2]. It's crucial for students to find a balance and use the internet responsibly to harness its benefits without being overwhelmed by its distractions.

Medical students are susceptible to the lure of internet addiction since they are already juggling the demanding requirements of their academic program. The constant need to connect, whether via online communities, social media or educational materials, can result in an unhealthy cycle of internet addiction. This may result in a lower number of friends, feelings of loneliness, mental illness, trouble getting along with family and a general decrease in life satisfaction. Excessive online use may also lead to depression, anxiety, stress, low self-esteem, body image

issues, eating issues etc[5]. Thus, it is clear that using the Internet has benefits and drawbacks, with the latter potentially contributing to Internet addiction which can be understood as follows;

Internet Addiction

There are many terms used to describe internet addiction; these terms include “Internet addiction disorder (IAD), problematic internet use (PIU), excessive internet use, compulsive internet use, pathological internet use and computer addiction," but all of them refer to the same idea: an individual loses focus on other facets of their existence because they are too engrossed in using the internet[6]. Before it can be determined whether internet addiction is a real issue and affects some of today's internet users, the term addiction needs to be defined. According to Young (2004), an addiction is defined as follows: any type of addiction is typically characterized by an insatiable need that is frequently followed by a lack of control, an obsession with usage and the continuation of the behaviour despite the issues it produces[7]. According to Kardefelt-Winther (2014) and Scimeca (2013), Internet addiction (IA) is commonly described as a disorder in which a person has lost control over their use of the Internet and continues to use it excessively to the point where they encounter problematic consequences that eventually have a negative impact on their lives[8]. Young states that pathological gambling can be used to describe Internet addiction as an impulse-control illness without the use of intoxicants[9].

In the rapidly evolving digital era, where the internet has become an integral part of daily life, the phenomenon of internet addiction has emerged as a significant societal concern. WHO stated in 2014 that internet and smartphone usage have become integral to modern-day life and have globally increased in recent decades[10]. The number of individuals accessing the internet increased by 185 million between 2000 and 2013. In June 2012, India had 137 million internet users, which was a big jump from 5 million in 2000[11]. A study in June 2013 by the Internet and

Mobile Association of India (IAMAI) and the Indian Market Research Bureau (IMRB) found that India had 190 million internet users[12].

Internet addiction (IA) among medical students can lead to psychopathology and affect their self-esteem, ultimately affecting the broader community of healthcare professionals and society at large. The DSM-V does not currently include a specific diagnosis for internet addiction. However, there has been ongoing debate and research in the field regarding the concept of internet addiction or problematic internet use. Persistent and recurrent problematic internet addiction leading to clinically significant impairment or distress. Based on the DSM- V-TR criteria for pathological gambling[13], Young has established criteria for internet addiction[14]. Her criteria solely take into account non-essential computer and Internet use, suchas non-business or non-academic use. Internet addiction is present if five or more of the eight criteria have been met during the previous six months.

According to Young criteria for internet addiction, the individual spends increasing amounts of time online to achieve the desired level of satisfaction. Attempts to cut down on or control internet use result in restlessness or irritability. Despite repeated attempts, the individual is unable to control or reduce internet use. Constantly thinking about online activities, planning the next online session or reliving past online experiences. Internet addiction among students can result in a disconnect from their physical environment, as they become engrossed in virtual realms. This detachment leads to a diminished awareness of their surroundings, making them prone to accidents. As their focus shifts online, vital interactions with the real world become secondary, posing significant risks to their safety and well-being. Turning to the internet as a way to cope with negative emotions such as stress, anxiety or depression. After deciding to limit or stop internet use, the person is unable to stick to the decision and ends up using the internet excessively. Engaging in deceptive behaviour, such as lying, to hide the extent of

internet use. Jeopardising or neglecting important social, work or educational responsibilities due to excessive internet use. Depending on others to provide support or financial assistance to deal with problems resulting from excessive internet use.

Managing internet addiction involves adopting healthy strategies to balance online and offline activities. Firstly, it's essential to set specific time limits for internet usage, allocating dedicated periods for work, study and leisure. By setting alarms on their devices, individuals can create designated breaks from internet and social media usage, fostering healthier screen habits and promoting mindful engagement with the digital world. Creating a structured daily routine can help establish a sense of discipline. Additionally, identifying and engaging in alternative hobbies or activities away from screens, such as exercise, reading or spending time with friends and family, can divert attention from the virtual world. Taking regular breaks, practicing mindfulness, and establishing a tech-free zone, especially before bedtime, contribute to a healthier relationship with the internet. Seeking support from friends, family, or mental health professionals can provide valuable assistance in managing internet use and addressing underlying issues. Developing a conscious awareness of one's online habits and making intentional choices to disconnect when necessary are key steps in regaining control and fostering a more balanced and fulfilling lifestyle. Nevertheless, it can result in mental health problems if it's not handled well, As such;

Depression and Internet Addiction

Millions of individuals throughout the world suffer with depression which is a complicated and complex mental illness. That is more than just the odd depressive or melancholy feelings that everyone encounters occasionally. Depression is a mood disorder characterized by persistent feelings of sadness, hopelessness and a lack of interest in daily activities. It is the presence of symptoms such as dysphoria (a state of unease or unhappiness), hopelessness, devaluation of

life, self-deprecation, lack of interest or involvement and an inability to experience pleasure[15]. It can manifest in different forms, with major depressive disorder (MDD) being the most common. Several factors have been identified as potential causes to depression, including genetic traits, psychological and social factors, environmental factors, changes in neurotransmitter levels in the brain, medical problems, drug use and early childhood trauma. Factors such as homesickness, loneliness, financial stress, academic pressure, excessive social media use, drug and alcohol misuse, low body image and self-esteem can all contribute to depression in college students. Leaving home and adjusting to a new city without the support of family members can cause homesickness and feelings of isolation. These characteristics are common among college students, but they may also contribute to depression in the general population. Many students start college excited about new experiences, connections and increased independence, but they often underestimate the extent of the changes they will confront and the importance of developing coping techniques. However, as time passes, individuals may get overwhelmed by rigorous schedules, social demands and the difficulties of juggling multiple tasks.

Student depression is becoming a serious issue that affects their academic performance. Stressful academic environments, social difficulties and life transitions—particularly for medical students who are frequently viewed as opening doors to fulfilling careers—can make the path to and exacerbate depressive symptoms. Due to its demanding field and the nature of medical education, which has long hours, high-stakes exams and intense pressure, it takes a toll on the mental health of medical students. The life of a medical student is characterized by rigorous academic demands, clinical rotations and the constant pursuit of excellence[16]. The immense pressure to succeed and the competitive environment can contribute to depression, making medical students particularly vulnerable to mental health issues. The demanding nature of their studies, coupled with the expectation to perform at the highest level, contributes to

depression. In addition, loneliness, lack of sleep and the dread of making mistakes all contribute to the high rate of depression in this group. Frequent internet users may have elevated levels of depression due to social isolation, less in-person encounters and pressure to present an idealized online persona. Internet addiction makes medical students more susceptible to depressive symptoms by adding to the already challenging intellectual terrain they must traverse. The internet can serve as a coping mechanism for depression, providing an escape from the pressures of medical college. However, excessive internet use can also contribute to feelings of isolation and inadequacy, exacerbating depressive symptoms. The struggle with mental health issues may hinder concentration and the ability to focus on studies. Over-reliance on the internet may lead to procrastination and reduced productivity. These challenges can have long-term consequences for the professional development of medical students. Seeking social support, maintaining a balanced lifestyle, and engaging in activities outside of academics are essential. It is crucial for medical students to adopt healthy coping mechanisms to manage depression. In order to help and assist students who are struggling with mental health issues, medical colleges should give priority to mental health services. Further crucial measures in treating depression and internet addiction are the development of rules for appropriate online behaviour and safe internet use.

Anxiety and Internet Addiction

Everyone has experienced anxiety at some point in their lives, as it is a normal human sensation. Anxiety serves as the body's natural, adaptive defence mechanism in the event of a perceived threat. It sets off the body's "fight or flight" reaction, which releases adrenaline and other hormones that sharpen focus and alertness. Lovibond and Lovibond defined anxiety as the presence of symptoms such as autonomic arousal (e.g., rapid heartbeat, shaking), situational anxiety (e.g., fear of the worst happening) and a subjective feeling of anxiousness and restlessness[15]. Although anxiety is a normal reaction to stress and can even be a driving force

in some circumstances, excessive or persistent anxiety can become a debilitating condition. High levels of anxiety are associated with many conditions, including generalized anxiety disorder, panic disorder, social anxiety disorder and phobias (American Psychiatric Association, 2013). Anxiety symptoms include restlessness, weariness, difficulty concentrating, irritability, difficulty sleeping, muscle tension, trembling and chest pain (American Psychiatric Association, 2013). Anxiety may be overwhelming and distracting for any individual. When anxiety becomes chronic or overwhelming, it can interfere with daily life, relationships and overall well-being of an individual. College students often experience anxiety due to a variety of factors, including social interactions, financial responsibilities and academic overload. Things that are necessary for a successful student: focus, concentration and enough sleep. On the other hand, excessive anxiety can cause restlessness, trouble focusing and disturbed sleep. Every one of these signs and symptoms has the ability to interfere with learning. While a variety of factors can be found in the general population that contribute to anxiety, college students may be particularly affected by their pursuit of academic excellence. In this instance the life of a medical student consists of hard assignments, extended study sessions and the obligation to get ready for a time when their knowledge will be vital to people's survival. In such a high-stakes environment, it's not surprising that anxiety becomes a prevalent aspect of their academic journey. For a fact there has been an exam or presentation that made an individual very anxious. Imagine going through that on a regular basis while also under pressure to finish medical school coursework. Anxiety can occasionally be an eternal companion in the world of medical students. The difficult nature of their study, which includes numerous workloads, clinical duties and fierce competition, frequently causes anxiety in them. Anxiety is often brought on by cyberbullying, persistent exposure to unrealistic social media standards or fear of missing out. Students who succumb to the allure of mindless scrolling or procrastination experience increased anxiety levels which exacerbates the pressure to perform

well academically. The challenge of striking a balance between the rigorous medical curriculum and the rapidly growing digital world can lead to a generalised sense of anxiety. To cope with this anxiousness some students may resort to the internet as a means of escape and solace. However, this dependency on the internet can develop to a serious problem: internet addiction. Currently, the incidence of internet addiction among medical students raises serious concerns. Notably, the cycle of anxiety and online escapism can negatively impact academic performance. Recognizing this, it becomes crucial to promote preventive measures and coping strategies for medical students, encouraging healthier ways to manage anxiety and maintain mental well-being throughout their education. For the medical community to successfully address these issues, there needs to be a greater understanding of and support for mental health.

Stress and Internet Addiction

In today's fast-paced world, stress has become an inevitable part of our lives. Stress refers to symptoms associated with an individual's over arousal and difficulty relaxing. It involves symptoms such as tension, irritation and a condition of chronic hyper arousal[15]. Work pressures, relationship challenges, financial issues and health concerns are common sources of stress. At its core, stress is the body's response to external pressures, both positive (eustress) and negative (distress). Chronic stress can have profound consequences for physical and mental health. Both physical and emotional indicators, such as headaches, fatigue, irritability and changes in sleep patterns, can serve as warning signs. Stress is an unavoidable thing especially for students as well, experiencing stress, as a natural response to the academic, social and personal demands. College students face a variety of educational, social, environmental and psychological transition challenges in their new campus setting, which can have an impact on their psychosocial well-being and academic performance. These occur because the current tertiary educational system differs significantly in its teaching methods, academic requirements, kind of faculty interactions and even student relations. The common stressors

affecting students include academic workload, exam pressure, social interactions and the uncertainty of the future. Stress appears to be highly widespread in college students' lives because they need to assure their academic survival and prepare for their future careers. It comes as no surprise that most of the academic stress at the college level is related to what and how students learn. When college students, dealing with the challenges of securing employment or seeking a life partner, the stress-inducing factors alone don't inherently trigger stress or tension. Rather, the experience of stress arises from the dynamic interplay between these external stressors and the students' subjective perception and response to them. The distinctive stressors faced by medical students, such as the extensive and complex curriculum, long hours of study and clinical work and the emotional toll of dealing with human health and illness. The challenges medical students face as they transition from classrooms to hospital wards learning to navigate patient interactions, ethical dilemmas and the emotional aspects of healthcare can lead to irregular sleep patterns and potential burnout. Medical education is known for its demanding nature, requiring students to navigate through a vast amount of information, face academic pressures and manage clinical responsibilities. In this challenging environment, the role of the internet in students' lives becomes crucial, but it also brings forth the potential for addictive behaviours that may contribute to heightened stress levels. As individuals attempt to combine online and offline commitments, constant connectivity may contribute to stress, which further risks these students' mental health. The challenging nature of medical college, combined with the appeal of the internet as a coping technique, breeds stress, worry and despair. The internet offers numerous benefits but its excessive use has raised concerns about potential negative consequences, particularly in the context of medical education. Effective stress management techniques involves a multifaceted approach. Practices such as mindfulness, meditation, regular exercise and maintaining a healthy lifestyle play pivotal roles in reducing stress levels. Time management skills are also instrumental in

preventing the feeling of being overwhelmed. Acknowledging the need for professional assistance is a vital step in managing stress. Therapists, counsellors and support groups provide valuable resources for individuals navigating overwhelming stressors. To preserve general wellbeing, it is imperative to understand this phenomenon and create practical management plans for it. People can better manage the complexity of their life by investigating various pressures.

Self-Esteem and Internet Addiction

The evaluative aspect of one's self-concept or self-esteem, is crucial in determining the mental and emotional health of an individual. Self-esteem is an individual's perspective of themselves and how they assess their own self-concept (Aydın and Sar, 2011)[17]. Rosenberg defined Self-esteem as an individual's attitude towards oneself, whether positive or negative and their assessment of their own ideas and feelings in connection to themselves as a whole[18]. Understanding the predictive value of self-esteem is crucial for improving the well-being of college students. Self-esteem is crucial for identity formation, social connections and mental health, according to several psychological models. High self-esteem is associated with good feelings, life satisfaction and effective coping mechanisms, whereas low self-esteem can lead to higher sensitivity to external judgements and stress. As students embark on their academic journeys, the influence of self-esteem becomes increasingly profound, affecting not only their academic performance but also their overall personal development. For students, the academic environment serves as a crucible for self-discovery and growth. The constant influx of challenges, ranging from academic pressures to social dynamics can significantly impact their self-perception. In medical school, where competitive settings and high-stakes exams are common, it becomes even more important to retain a good sense of self-worth. A positive self-image not only fosters resilience in the face of challenges but also influences decision-making and interpersonal relationships. Differing degrees of self-esteem influence a variety of

detrimental consequences, such as self-distrust and the emergence of addiction, in this relationship[18]. Furthermore, Meerkerk strengthened this connection by showing that obsessive internet users not only displayed higher levels of depression but also significantly poorer levels of self-esteem[19]. These results strongly suggest that a person's sense of self-worth is a major factor in predicting the probability and severity of internet addiction, especially for certain groups of people, like medical students, who may experience severe pressures and difficulties in both their personal and professional lives. Comprehending and tackling this correlation can be crucial in formulating effective measures to alleviate the detrimental consequences of internet addiction on the psychological welfare of people, especially in the rigorous setting of medical education. However excessive internet use may contribute to a decline in self-esteem, as students may feel a sense of guilt or inadequacy related to unmet academic goals or time mismanagement. Notably, the American Psychiatric Association recently updated its classification of internet addiction, making it an official mental illness[20]. Since medicalstudents are susceptible to internet abuse, it is crucial to look into how often they use the internet.

In order to shed light on how excessive internet usage may either cause or worsen mental health issues among medical students, the current study attempts to identify internet addiction and investigate the relationship between internet addiction and psychopathological factors as well as self-esteem in medical students. Additionally, the study will investigate the relationship between medical students' levels of self-esteem and internet addiction, offering important insights into the possible effects on their general psychological well-being. Through tackling these facets, the study aims to make a substantial contribution to the current conversation on internet addiction and its consequences among medical students.

Relevance of the Study

For medical students and their health, the study is extremely relevant and wide-ranging. Medical students are more susceptible to internet addiction due to the hard nature of medical college, which includes high academic standards and a heavy workload. People may turn to the virtual world for comfort and distraction due to the ongoing pressure to perform well in high-stakes situations and academic settings, which can result in excessive internet use. Theinternet's constant connectedness and information overload may increase stress, anxiety and depression in medical students. Further, the distorted online representations can contribute toa negative impact on self-esteem. Students in India are becoming increasingly concerned aboutinternet addiction. Empirical studies indicate a significant association between elevated levels of internet usage and psychopathological symptoms, such as depression, anxiety and stress. Additionally, people who struggle with internet addiction have been found to have lower levels of self-esteem. For the purpose of creating efficient interventions and support networks for Indian students, it is imperative to comprehend these relationships[21]. This study will help to build an understanding of internet addiction and how depression, anxiety, stress and self-esteem are connected with it. Furthermore, knowledge of the complex interaction with psychopathology can help develop mental health interventions and support programmes for medical students. Since the current study is assessing medical students, we have found that this course will be better helped if we prepare them for the hazards in the overall health area. This kind of study advances our knowledge of these problems from an academic standpoint while also having applications in the form of enhancing medical students' well-being and possibly enhancing their performance in both the classroom and the workplace. It is anticipated that the research will provide vital information for both scholarly comprehension and the application of useful strategies to improve medical students' general resilience and well-being in the face of internet-related difficulties.

REVIEW OF LITERATURE

REVIEW OF LITERATURE

The literature review in this thesis is like a strong foundation that supports all the research we're doing. It helps us understand the background of our study by looking at what other experts have already discovered about our topic. We're focusing on internet addiction, which is a problem that's affecting a lot of people's mental health nowadays. As we learn more about it, we're trying to figure out what causes it, who it affects the most and how we can help treat it. It's important to understand these things so we can find better ways to deal with internet addiction and its effects on people's lives. Studies have shown that internet addiction can leadto serious mental health issues like depression, anxiety, stress and low self-esteem. This research emphasizes why we need to take action to address internet addiction in our society, especially as more and more people spend time online. By understanding internet addiction better, we can create targeted plans to help those affected by it. In this thesis, we'll be carefullygoing through lots of different studies and expert opinions from the years 2000 to 2022. We'llbe analysing them to get a better understanding of internet addiction and how we can tackle iteffectively.

Depression and Internet Addiction

Singh and Joshi's (2008) examined relationship of depression, life stress and personality with suicidal ideation among college students. Their findings revealed a notable positive correlation between suicidal ideation and various factors, including depression, stressful life events and specific personality dimensions such as extraversion and psychoticism. Employing stepwise multiple regression analysis, the study identified a linear combination of three primary predictors associated with suicidal ideation: depression, extraversion and stressful life events. These findings shed light on the complex interplay of psychological factors contributing to

suicidal ideation, offering valuable insights for targeted interventions and preventive measures aimed at addressing mental health challenges and reducing the risk of suicidal behaviour[22].

Joseph's (2011) conducted a study in Mangalore city focused on assessing the prevalence of depression among pre-university college students. The research uncovered a concerning prevalence of depression within the surveyed colleges, with older students displaying elevated levels of depressive symptoms. Furthermore, the study identified a significant association between students' academic streams and depression, with those enrolled in commerce streams demonstrating a higher susceptibility to depression compared to their counterparts in science streams. Additionally, the research noted slightly higher depression levels among male students and those attending government colleges. These findings underscore the multifaceted nature of depression prevalence among pre-university college students, emphasizing the importance of targeted interventions and support mechanisms to address the mental health needs of this vulnerable demographic[23].

The study conducted by V. Carli et al. (2012) on "The association between pathological internet use and comorbid psychopathology," highlighted a significant correlation between pathological internet use and depressive symptoms, with this association being particularly robust and enduring. Interestingly, the research found that males exhibited stronger connectionsbetween internet overuse and psychopathology across all age groups. However, a limitation ofthe study was the inconsistent definition and diagnosis of problematic internet use, which mayhave impacted the precision of the findings[24].

Kaur's (2014) examined depression levels among rural and urban secondary school students in relation to their achievement motivation. Findings revealed no significant gender difference in depression levels, nor was there a notable contrast in depression or achievement motivation between rural and urban students. Moreover, the research indicated no significant correlation

between depression and achievement motivation among both rural and urban male and female secondary students, suggesting these factors operate independently in the educational context. These insights underscore the need for comprehensive approaches to addressing mental health concerns among secondary students, irrespective of their geographic or gender backgrounds[25].

The research conducted by Farah Younes et al. (2016), on "Internet Addiction and Relationships with Insomnia, Anxiety, Depression, Stress and Self-Esteem in University Students," emphasizes the importance of recognizing and addressing internet addiction among university students. The study underscores that internet addiction often coexists with various psychological issues such as insomnia, anxiety, depression, stress and low self-esteem. Consequently, therapeutic interventions need to adopt a comprehensive approach that not only targets internet addiction but also addresses the associated psychosocial stresses. This integrated approach is essential for effectively mitigating the negative impacts of internet addiction on students' mental well-being and overall quality of life[26].

Manjari's in 2016 focused on assessing depression levels among college students, analysing variations based on age and gender. The research findings indicated no significant difference in depression levels between male and female college students overall. However, it was observed that female students tended to experience higher levels of depression compared to their male counterparts. These findings shed light on gender-specific patterns of depression among college students, highlighting the importance of tailored interventions to address the mental health needs of this demographic, particularly among female students[27].

Ahmed K. Ibrahim's (2022) studied "prevalence and determinants of internet addiction among medical students and its association with depression," significant insights into thepsychological issue of internet addiction among medical students were revealed. The researchidentified that approximately 9% of medical students at Assiut University experience internet

addiction during their undergraduate years, a phenomenon that can significantly disrupt their lives and academic endeavours. Interestingly, the study found that female students with working mothers, individuals from lower-class families, those with fewer depressive symptoms and those with unmonitored internet privacy exhibited lower rates of internet addiction. These findings underscore the complex interplay of socio-demographic factors and mental health variables in shaping the prevalence of internet addiction among medical students, providing valuable insights for targeted interventions and support strategies aimed at mitigating its adverse effects[28].

Anxiety and Internet Addiction

Vaghela (2014) conducted a study on "Anxiety between Internet Addicts and non-Addicts Adolescents of Urban and Rural Area'. The findings underscore the heightened risk of anxiety associated with excessive internet use among adolescents. Addressing internet addiction is crucial in addressing potential mental health issues, particularly anxiety, among this demographic. Efforts focused on promoting healthy internet habits and offering support for mental well-being are imperative to mitigate the adverse effects of excessive internet use on adolescent health[29].

Bengü Yücens (2018) researched on the relationship between internet addiction (IA), social anxiety, impulsivity, self-esteem and depression among Turkish undergraduate medical students. The findings revealed a strong correlation between IA and social phobic avoidance, suggesting that social anxiety may contribute to IA development. Additionally, the study highlighted the potential exacerbation of IA by underlying mental health issues, particularly depression. Surprisingly, no significant connection was found between impulsivity and IA, contrasting with findings from other addiction studies. These results emphasize the intricate interplay between psychological factors and IA development, underscoring the importance of

addressing mental health issues in interventions targeting IA prevention and treatment among college students[30].

Emilia Potembska et al. (2018) studied on "Psychopathological symptoms in individuals at risk of Internet addiction in the context of selected demographic factors," individuals identified as at risk for internet addiction displayed markedly higher levels of obsessive-compulsive, conversion, anxiety and depressive symptoms. Interestingly, participants residing in rural areas showed more pronounced psychopathological symptoms compared to their urban counterparts, particularly in phobic, obsessive-compulsive and hypochondriac manifestations. These findings suggest a nuanced relationship between internet addiction risk and psychopathological symptoms, highlighting the potential impact of demographic factors such as urbanicity on the severity of psychological distress associated with problematic internet use[31].

Sunitha Kandasamy (2019) conducted on anxiety disorder among college students with internet addiction highlights the growing concern of internet addiction among youth. Kandasamy emphasizes that if left unattended, internet addiction can have detrimental effects on the mental and physical well-being of young individuals. To address this issue effectively, Kandasamy suggests the implementation of holistic education programs based on positive youth constructs. Such programs are deemed necessary to provide comprehensive support and guidance to youth struggling with internet addiction, promoting their overall well-being and helping them cultivate healthier relationships with technology[32].

Kendall D. Naceanceno, et al. (2020) studied "A comparison of anxiety levels among college students," the analysis of results indicated that there was no significant difference in anxiety levels among college students of different classifications or by the number of semester hours taken. However, the study revealed a significant difference in anxiety levels among male and female college students, as well as among students with different majors. These findings suggest that while factors such as academic classification and course load may not significantly

influence anxiety levels, gender and academic majors could play a role in determining anxiety levels among college students. Such insights can inform targeted interventions and support services aimed at addressing anxiety in college settings, considering the varying needs of students based on gender and academic pursuits[33].

Mounika Mandla et al. (2022) researched on "Internet addiction and its association with anxiety in medical undergraduates". Findings indicate that internet addiction is prevalent among medical students and is significantly associated with anxiety. Importantly, the study reveals that gender does not influence the likelihood of internet addiction among medical undergraduates. These results emphasize the importance of addressing psychological issues, particularly anxiety, in efforts aimed at combating internet addiction among medical students. By addressing both internet addiction and its associated psychological factors, interventions can provide more comprehensive support to promote the mental well-being of medical undergraduates[34].

Stress and Internet Addiction

In a study conducted by Ranjita Misra & McKean, (2000) titled “College students' academic stress and its relation to their anxiety, time management and leisure satisfaction” with a sample of 249 undergraduate university students, it was observed that these students experienced elevated levels of stress attributed to academic commitments, financial pressures and a deficiency in time management skills. The study highlighted the detrimental impact of stress on students' health, emotional well-being and academic performance, particularly when they interpret the stressors negatively or when stress levels escalate. These findings underscore the importance of implementing effective stress management strategies and support systems to help students cope with academic challenges and promote their overall well-being during their university years[35].

Jogaratnam and Buchanan (2004) researched on “Balancing the demands of school and work: Stress and employed hospitality students” results shown that female students reported a higher level of stress compared to their male counterparts, specifically concerning the dimension of time pressure stress. This suggests that female students may perceive greater pressure related to time management and deadlines compared to male students. Understanding these gender differences in stress perception can help educators and policymakers develop targeted interventions and support systems to address the specific needs of female students and promote their overall well-being and academic success[36].

Bataineh in 2013 studied on “Academic Stress among Undergraduate Students: The Case of Education Faculty at King Saud University” revealed several factors contributing to moderate levels of stress among students. These factors included academic overloads, challenging courses, insufficient time for studying, heavy workload every semester, stressful exams, low motivation and high family expectations. Additionally, fear of failure emerged as the primary source of stress among students. These findings highlight the multifaceted nature of academic stress experienced by college students and underscore the importance of addressing various stressors to support students' well-being and academic success[37].

Moreira and Furegato's (2013) study focused on assessing stress levels and signs of depression among students in the final semester of two undergraduate nursing courses. The research aimed to compare these variables and establish associations between them. The findings revealed that a substantial proportion of participants experienced various levels of depressive symptoms, with 69.8% reporting no depression, 18.2% experiencing dysphoria, 6.8% exhibiting moderate depression and 5.7% indicating severe depression. Interestingly, the prevalence of depression was relatively low compared to the general population. Although medium stress levels were predominant among participants (76.9%), there was no significant difference in stress scores between the two groups of students. However, the data suggested a significant relationship

between stress and the presence of signs of depression, particularly severe depression. These findings underscore the importance of addressing mental health concerns among nursing students and implementing interventions to mitigate stress and prevent the onset of depressive symptoms, thereby promoting overall well-being throughout their academic journey[38].

In a study conducted by Sachin Gedam et al. (2016) titled "Internet Addiction among Medical Students from Central India" a significant relationship was observed between internet addiction and psychopathology, including stress, depression and anxiety. These findings underscore the importance of taking preventive measures to promote healthy internet use and raise awareness among students. Given the substantial correlation between internet addiction and psychopathology, interventions aimed at addressing internet addiction should also consider the potential impact on mental health. By fostering healthy internet habits and providing support for psychological well-being, efforts can mitigate the adverse effects of internet addiction among medical students[39].

Nitin Anand in 2018, studied on titled "Internet use behaviours, internet addiction and psychological distress among medical college students," it was discovered that a significant percentage of medical students suffer from internet addiction (IA). This finding underscores the potential negative impact of IA on medical students' progress toward their long-term professional objectives and education. Recognizing and addressing IA, along with associated psychological discomfort, is crucial for the well-being and academic success of medical students. Early recognition and intervention can help prevent further detrimental effects and support students in achieving their academic and professional goals[40].

Moustafa Sayed (2022) researched on "Internet addiction and relationships with stress, depression, anxiety and academic performance among Egypt pharmacy students." Given the typical association between internet addiction and mental health disorders, it becomes crucial to identify and address this issue among students. Treatment approaches should encompass

strategies for managing anxiety disorders and common psychological conditions such as stress, sadness and anxiety. By recognizing and intervening early on internet addiction and its associated mental health implications, educational institutions can support students in maintaining their well-being and academic performance[41].

Self-Esteem and Internet Addiction

In a study conducted by Ellison et al. (2008) focusing on self-esteem and use of online social network sites: A longitudinal analysis, studies have investigated students' engagement with specific social networking sites and its correlation with their self-esteem levels. Findings from these studies indicate that students with lower self-esteem tend to spend more time on social networking sites compared to their peers with higher self-esteem. This trend suggests that individuals with lower self-esteem may utilize social networking sites as a means of seeking validation, social connection, or distraction from negative self-perceptions. Notable studies in this area include those by, which provide insights into the complex interplay between students' self-esteem and their online behaviour, on social networking platforms[42].

Kim and Davis (2009) found that self-esteem was linked to problematic internet use, suggesting that individuals with lower self-esteem may be more susceptible to developing unhealthy patterns of internet usage. These findings underscore the complex interplay between psychological factors such as depression, anxiety and self-esteem in influencing individuals' relationship with the internet, highlighting the importance of addressing underlying psychological issues in interventions aimed at mitigating problematic internet use[43]. Similarly, Jackson et al. (2010) identified self-esteem as a factor associated with internet use, indicating its role in shaping individuals' online behaviours and interactions[44].

In the study conducted by Ersin Budak et al. in 2015 on the "Relationship between internet addiction, psychopathology and self-esteem among university students," the researchers found a significant correlation among internet addiction, general psychopathology and self-esteem.

This important discovery suggests that when addressing internet addiction, it is imperative to consider not only the addictive behaviour itself but also underlying psychological issues and self-esteem levels. By recognizing the interplay between these factors, interventions can be designed to target multiple dimensions of the problem, leading to more comprehensive and effective treatment strategies for individuals struggling with internet addiction. This study underscores the importance of taking a holistic approach to address internet addiction and associated psychological factors in university students[45].

In Laila Naseri's (2015) article titled "Perceived Social Support, Self-Esteem and Internet Addiction Among Students of Al-Zahra University," the study's results revealed a notable association between self-esteem and internet addiction among university students. Specifically, individuals with low self-esteem were found to be more susceptible to internet addiction. This finding underscores the significance of self-esteem as a contributing factor in the development and perpetuation of problematic internet usage patterns. By recognizing the role of self-esteem in internet addiction, interventions aimed at mitigating excessive internet use can incorporate strategies to bolster individuals' self-esteem, thereby addressing both the symptoms and underlying psychological factors associated with internet addiction among university students[46].

Vally (2019) have conducted research on Generalized problematic Internet use, depression and explicit self-esteem highlighting the relationship between self-esteem and problematic internet use (PIU). Studies demonstrate that individuals with lower self-esteem are at a higher risk of developing PIU. The findings underscore the importance of addressing self-esteem issues in interventions aimed at preventing and treating internet addiction, emphasizing the need for comprehensive approaches to promote healthy internet usage habits[47].

In Sana Dhamija's (2021) research article titled "Prevalence of smartphone addiction among medical college students and its relationship to sleep disturbance and low self-esteem," findings

suggest a considerable prevalence of smartphone addiction among medical students. This addiction is notably associated with two significant factors: inadequate sleep and low self-esteem. The study's results shed light on the pervasive nature of smartphone addiction among medical college students and its detrimental impact on their sleep patterns and self-esteem levels. These findings underscore the importance of addressing smartphone addiction as a critical public health concern, particularly among the medical student population and highlight the need for interventions aimed at promoting healthy smartphone use habits and improving mental well-being[48].

The society and the medical community would also be indirectly impacted by internet addiction. Therefore, research on Internet addiction in medical students is necessary. A significant percentage of medical students suffer from Internet addiction, which can have negative effects on their ability to pursue long-term professional goals and advance their medical education. It's critical to recognise and treat Internet addiction and psychological suffering in medical students early on.

Gap Analysis

Research specifically addressing internet addiction in medical students is notably limited, there is a significant gap of this issue within the context of medical education. While some studies have explored internet addiction, they often focus on a single aspect of the relationship, such as its influence on psychopathology. This narrow approach fails to capture the complex interplay of factors affecting medical students. Importantly, there is a clear deficiency in the literature examining the comprehensive relationship between internet addiction, psychopathology, and self-esteem within the unique setting of medical education. This gap highlights the need for more holistic research that considers multiple psychological factors and their interactions in the context of the demanding medical college environment. By addressing

this gap, the present study aims to provide a more nuanced and complete understanding of internet addiction among medical students, considering its connections to both psychopathology and self-esteem.

AIM AND OBJECTIVES

AIM AND OBJECTIVES

Aim

The aim of the study is to assess the relationship between Internet addiction, psychopathological symptoms and self-esteem among medical students. Medical students are vulnerable to internet addiction, so it is important to find out how frequently they use the internet. The purpose of the current study is to identify online addiction and investigate the connection between internet addiction and psychopathological variables, as well as self-esteem, in medical students.

Objective

To examine the relationship between Internet addiction, psychopathological symptoms and self-esteem among medical students.

MATERIALS AND METHODS

MATERIALS AND METHODS

The methodology section of this study serves as a detailed roadmap outlining the approach undertaken to explore the intricate relationship between Internet addiction, psychopathological symptoms and self-esteem among medical students. This section is meticulously crafted to furnish readers with a thorough comprehension of the research framework, encompassing various elements such as the research design, sampling methodology, sample size determination, study location, duration, criteria for participant inclusion and exclusion, statistical methodologies employed and the tools used for data collection and analysis.

Research Question

Is there a relationship between Internet addiction, psychopathological symptoms and self-esteem among medical students?

Hypothesis

Alternative Hypothesis (H1): There will be a significant relationship between Internet addiction, psychopathological symptoms and self-esteem among medical students.

Null Hypothesis (H0): There will be no significant relationship between Internet addiction, psychopathological symptoms and self-esteem among medical students.

Study Design

A cross-sectional research design is implemented to explore the relationship between Internet addiction, psychopathological symptoms and self-esteem among medical students. This design allows for the collection of data at a single point in time, providing insights into the association of variables of interest within the target population.

Sampling

Purposive sampling is employed to select participants for this study. This technique enables the researcher to specifically choose participants who meet predetermined criteria, ensuring that the sample is representative of the population under investigation.

Sample Size

The sample consists of 150 medical students, which comprises of 75 males and 75 females participants, from Santosh Medical College and Hospital in Ghaziabad.

Place of Study

The data is collected from Santosh Medical College and Hospital in Ghaziabad, Uttar Pradesh.

Inclusion Criteria

- Participants from medical background were included.
- Age range of 18 to 25 years being considered for the study.
- Participants must provide informed consent to participate in the study.

Exclusion Criteria

Individuals with any other psychiatric problems, serious physical illnesses or disabilities are excluded from the study.

Statistical Analysis

Descriptive statistics such as mean, standard deviation and Pearson's correlation coefficient are used to examine the relationships between Internet addiction, psychopathological symptoms and self-esteem among medical students.

Data Collection Tools

Three standardized test measures are used to collect data –

Internet Addiction Test (IAT Kimberly Young, 1998) :

Dr. Kimberly Young created the Young Internet Addiction Test, also known as the IAT or simply YIAT, in 1996 and it is the most commonly used test for internet addiction (Faraci, Craparo, Messina & Severino, 2013). Twenty items in the form of a Likert scale make up the most recent version that Young has released. This IAT assesses aspects like excessive internet use, how important it is to the participant and how using the internet can affect one's social or professional life. The likelihood that a participant would be labelled as internet dependent or addicted increases with score.

Depression Anxiety Stress Scale (DASS-42; Lovibond and Lovibond, 1995) :

Lovibond and Lovibond created the DASS questionnaire in 1995 to measure the mainindicators of stress, anxiety and depression. It has also been used to gauge how well patients are responding to treatment. It has been established that the questionnaire possesses sufficient psychometric qualities and is comparable to other reliable measures. Research results confirm that it is a valid and validated tool for assessing negative mental states in adults, including stress, anxiety and depression (both patients and non-patients). The three self-reported scores that make up the 42 items on the questionnaire are intended to evaluate DASS. The DASS uses a 4-point Likert scale, ranging from 0 to 3, to evaluate negative emotional symptoms. The resulting ratings are then categorised as "normal, mild, moderate, severe or extremely severe," per the manual.

Rosenberg Self-Esteem Scale (RSES, Morris Rosenberg, 1965) :

The most widely used self-esteem scale is the Rosenberg self-esteem scale (RSES). Dr. Morris Rosenberg created it in 1965 as a gauge of a person's total sense of worth and value or global self-esteem (Rosenberg 1965). There are ten items used in the RSES and respondents indicate how much they agree with each one (reverse scored). Although a 4-point Likert response style is commonly used to administer it, the Guttman scale was initially designed with scale points corresponding to strongly agree, agree, disagree and strongly disagree.

RESULTS

RESULTS

The results section presents the key findings from the statistical analysis conducted to address the research objectives. The aim of this study was to investigate the relationship between internet addiction, psychopathology and self-esteem among medical students. Utilizing a variety of statistical analyses including independent samples mean, standard deviation (SD), Pearson correlation and graphical representations, we sought to uncover key insights into these interconnected variables. The following results were obtained:

Table 1: Shows the Mean and Standard deviation of Internet Addiction, Depression, Anxiety, Stress and Self-Esteem in Medical Students.

Variables	N	Mean	Std. Deviation
Internet Addiction	150	40.8	17.404
Depression	150	12.82	9.175
Anxiety	150	12.03	8.848
Stress	150	14.93	9.327
Self Esteem	150	18.96	4.834

Figure 1: Shows the Mean and Standard deviation of Internet Addiction, Depression, Anxiety, Stress and Self-Esteem in Medical Students.

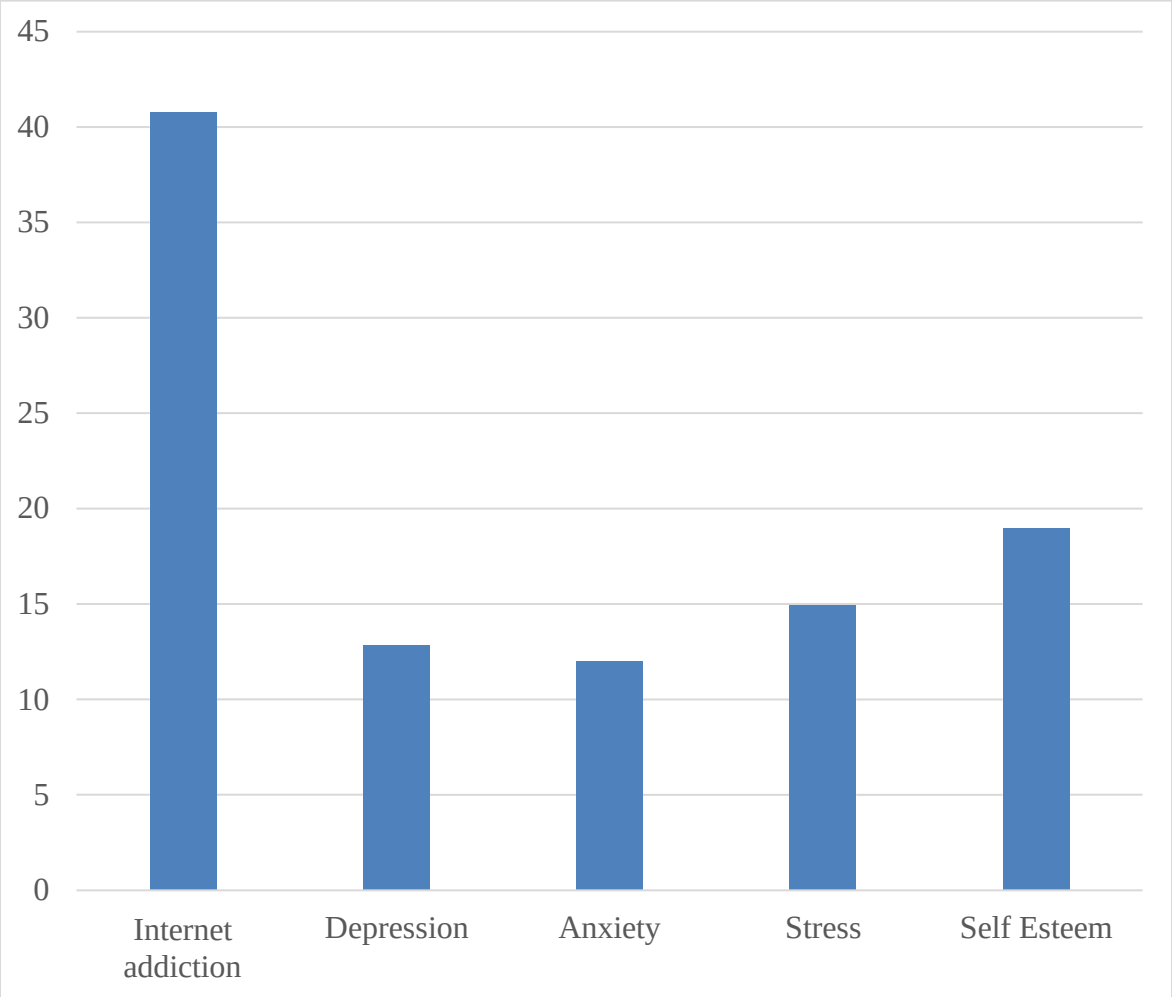

Table 2: Shows the Pearson Correlation Coefficients between Internet Addiction, Depression, Anxiety, Stress and Self-Esteem in Medical Students.

Pearson Correlation Variables	Internet Addiction	Depression	Anxiety	Stress	Self – Esteem
Internet Addiction	1	.542	.453**	.539**	-.238**
Depression	.542	1	.876**	.848**	-.317**
Anxiety	.453**	.876**	1	.799**	-.271**
Stress	.539**	.848**	.799**	1	-.321**
Self-Esteem	-.238**	-.317**	-.271**	-.321**	1

****Correlation is significant at the 0.01 level.**

DISCUSSION

DISCUSSION

The aim of the present study was to assess internet addiction and its relationship with psychopathological symptoms and self-esteem among medical students. The aim was achieved by selecting an acceptable sample and conducting assessments. The collected data was evaluated with relevant statistical methods. This discussion part covers statistical methodologies, interpretation and collaboration with current research material. It is organized as follows: Study sample size, Participant age distribution, Validation of hypotheses and findings from existing literature.

The procedure involved selecting a sample of 150 medical students which comprises 75 males and 75 females from Santosh Medical College and Hospital, Ghaziabad. The assessment tools used were the Internet Addiction Test (IAT), Depression Anxiety Stress Scale (DASS-42) and the Rosenberg Self-Esteem Scale. Data analysis encompassed measures such as Mean, Standard deviation and Pearson's correlation coefficient. The sample had an age range of 18-25 years.

Internet addiction is becoming an increasingly prevalent issue, particularly among young adults (17-25 years) and medical students. There is a study that found a remarkably high prevalence of 23.3% for internet addiction among medical students in Central India, with 21% experiencing moderate addiction and 2.3% severe addiction. Importantly, those addicted to the internet exhibited significantly higher rates of psychopathologies like anxiety, depression, increased psychological distress and reduced psychological well-being. This highlights the negative mental health impacts that problematic internet use can have. Given the essential role of the internet in modern life, especially for students, addressing and preventing compulsive internet use is crucial to avoid adverse consequences on the psychological health of young adults[39].

As depicted in Table 1 the mean of internet addiction was found to be 40.8 among the sample of medical students, suggesting moderate levels of internet addiction within this demographic. A study conducted by Kuss and Lopez-Fernandez (2016) explored the prevalence and impact of internet addiction among students in higher education. The findings indicated that medical students are particularly susceptible to internet addiction due to the high levels of academic pressure and stress they experience. This study reported that internet addiction prevalence among medical students ranged from moderate to high, with significant associations with symptoms of depression, anxiety and stress. Specifically, the study highlighted that medical students might use the internet as a coping mechanism to deal with academic-related stressors, thereby increasing the risk of developing addictive behaviours[49].

Whereas, Mean of depression is found to be 12.82, anxiety is 12.03 and the mean of stress is 14.93. Average scores for depression, anxiety and stress fell within the mild to moderate range. The mean score of self-esteem was 18.96, suggesting that on average, students have a moderate level of self-esteem.

Hypothesis-Analysis

The null hypothesis asserts that "There will be no significant relationship between internet addiction, psychopathological symptoms and self-esteem among medical students."

To investigate this hypothesis, Table 2 needs to be interpreted in detail. The results revealed significant positive correlations between internet addiction and depression ($r = 0.542$, $p < 0.01$). This research finding of a positive correlation between internet addiction and depression among medical students is supported by a study conducted by Ahmed K. Ibrahim (2022)[28] titled "Prevalence and Determinants of Internet Addiction Among Medical Students and Its Association with Depression." Ibrahim's study comprehensively investigated the prevalence

and determinants of internet addiction among medical students and its association with depression. The analysis of the data revealed a significant positive correlation between the participants' internet addiction scores and their depression scores, indicating that higher levels of internet addiction were associated with increased symptoms of depression in this population. Ibrahim's study delves into the potential mechanisms underlying this correlation, such as the use of the internet as a maladaptive coping strategy for medical students facing academic and personal stressors, as well as the impact of excessive internet use on social isolation and disruption of daily routines, which may contribute to the development or exacerbation of depressive symptoms. With above research findings it can be seen that Medical students face numerous academic and personal pressures, which can increase their vulnerability to depression.

This research results also revealed significant positive correlations between internet addiction and anxiety ($r = 0.453$, $p < 0.01$). The positive correlation between internet addiction and anxiety among medical students aligns with previous research findings conducted by Mounika Mandla et al. (2022)[34] titled "Internet Addiction and Its Association with Anxiety in Medical Undergraduates." Mandla et al.'s study comprehensively investigated the prevalence of internet addiction among medical undergraduates and its association with anxiety levels. The research involved a sample of medical students who were assessed for their levels of internet addiction and anxiety using validated scales and questionnaires. The analysis of the data revealed a significant positive correlation between the participants' internet addiction scores and their anxiety scores, indicating that higher levels of internet addiction were associated with increased symptoms of anxiety in this population. Mandla et al.'s study explores the potential mechanisms underlying this correlation, such as the use of the internet as a means of avoidance or escape from academic and social stressors, as well as the impact of excessive internet use

on sleep patterns, time management and overall well-being, which may contribute to the development or exacerbation of anxiety symptoms among medical students.

A significant positive correlations between internet addiction and stress was also observed ($r = 0.539$, $p < 0.01$). The following research results of a positive correlation between internet addiction and stress among medical students is supported by a study conducted by Nitin Anand in 2018[40] titled "Internet use behaviours, internet addiction and psychological distress among medical college students." Anand's research aimed to examine the relationship between internet addiction and psychological distress, including stress, among medical college students. The findings revealed that students with higher levels of internet addiction often experienced greater psychological distress, particularly in the form of elevated stress levels. Additionally, the study highlighted the importance of addressing problematic internet use behaviours in order to effectively alleviate stress and promote overall psychological well-being among medical students. Anand's research provides valuable insights into the detrimental impact of excessive internet use on the stress levels and mental health of this specific population, underscoring the need for interventions and support systems to help medical students develop healthier internet habits and coping mechanisms.

The study's results revealed a significant negative correlation between internet addiction and self-esteem ($r = -0.238$, $p < 0.01$). This indicates that as internet addiction increases, self-esteem tends to decrease significantly. Study support this research finding, one of which is a study conducted by SA. Bahrainian[50] titled "Relationship of Internet Addiction with Self-Esteem and Depression in University Students." Bahrainian's research examined the associations between internet addiction, self-esteem and depression among university students. The findings revealed a significant negative correlation between internet addiction and self-esteem levels, indicating that higher levels of internet addiction were associated with lower levels of self-esteem. The study explored potential mechanisms underlying this relationship, such as the

tendency for individuals with low self-esteem to seek validation and escape through excessive internet use, which can further perpetuate a cycle of addiction and diminished self-worth.

The findings are in consensus with the above mentioned findings. Therefore, with the above findings the null hypothesis is rejected.

Additionally, the research highlighted the potential impact of internet addiction on social disconnection, academic underperformance and negative self-evaluations, which may contribute to lower self-esteem among affected individuals. These findings underscore the importance of addressing self-esteem issues and promoting healthy internet use patterns among medical students to foster their overall well-being and personal development.

CONCLUSION

CONCLUSION

The internet as a vast network connecting millions of computers, websites and devices, allowing for rapid communication and access to information. However, it highlights that some people can become so engrossed in using the internet that it negatively impacts other aspects of their lives like relationships, jobs and health - a condition known as internet addiction.

It traces the evolution of internet usage over the past decade, from basic activities like email and research to the ubiquity of smart devices, high-speed connectivity, social media, online entertainment and education. The internet has become a valuable resource for students, especially medical students, providing access to educational materials, research and global collaboration.

However, the medical students are susceptible to internet addiction due to the demanding nature of their academic program and the constant need to connect online. Excessive internet use can lead to psychopathological issues like depression, anxiety, stress and low self-esteem.

This indicates that having internet addiction leads to a variety of psychological problems, therefore this study aims to examine the relationship between internet addiction, psychopathological symptoms (depression, anxiety, stress) and self-esteem among medical students.

A cross-sectional research design is used to collect the data. Purposive sampling is employed to select a sample of 150 medical students aged 18-25 years from Santosh Medical College and Hospital in Ghaziabad. The study excludes individuals with psychiatric problems, serious illnesses or disabilities.

Data is collected using three standardized tools: Internet Addiction Test (IAT) by Kimberly Young to assess excessive internet use. Depression Anxiety Stress Scale (DASS-42) by

Lovibond and Lovibond to measure stress, anxiety and depression levels. Rosenberg Self-Esteem Scale (RSES) to evaluate global self-esteem and self-worth.

Descriptive statistics (mean, standard deviation) and Pearson's correlation coefficient are used for statistical analysis to examine the relationships between the variables of interest.

The results revealed a substantial prevalence of internet addiction among the medical students surveyed, with mean scores indicating notable levels of addictive internet usage patterns. This finding aligns with previous research that has identified medical students as a vulnerable group due to the demanding nature of their academic program and the potential for using the internet as a coping mechanism or escape.

Furthermore, the study uncovered significant positive correlations between internet addiction and psychopathological symptoms, specifically depression, anxiety and stress. These findings are consistent with existing literature that has documented the association between excessive internet use and mental health problems. The constant need for connectivity, information overload and potential for online distractions may contribute to heightened levels of psychological distress among medical students, who already face numerous academic and personal pressures.

Notably, the study also revealed a significant negative correlation between internet addiction and self-esteem. This finding suggests that individuals with lower self-esteem may be more susceptible to developing internet addiction or that excessive internet use can contribute to a decline in self-worth over time. The interplay between internet addiction and self-esteem is particularly relevant for medical students, who often operate in competitive environments and face high-stakes evaluations that can impact their self-perception and resilience.

The interconnected nature of these variables underscores the importance of adopting a comprehensive and integrative approach when addressing internet addiction and its associated psychological impacts. Interventions that solely target internet addiction without considering underlying mental health issues or self-esteem challenges are unlikely to be effective in the long term.

To effectively support the well-being and academic success of medical students, it is crucial for medical institutions to prioritize mental health services and implement multifaceted strategies. These may include:

Raising awareness about the risks and consequences of internet addiction through educational programs and workshops, promoting healthy internet habits and fostering a balanced approach to technology use.

Providing accessible and confidential counselling services, support groups and professional therapy to address underlying psychological issues such as depression, anxiety, stress and low self-esteem.

Incorporating psychoeducation and skill-building workshops focused on stress management, emotion regulation and self-esteem enhancement to equip students with effective coping strategies and foster resilience.

Encouraging collaboration between academic departments, mental health professionals and student support services to develop comprehensive and holistic approaches tailored to the unique needs of medical students.

Implementing institutional guidelines and policies regarding appropriate internet use and screen time limits within academic settings, promoting offline activities and social interactions.

By fostering a supportive environment that promotes mental well-being, medical institutions can equip their students with the necessary skills and resources to navigate the demands of their academic and professional journeys while maintaining a healthy relationship with technology. Ultimately, addressing internet addiction and its psychological impacts is not only crucial for the well-being of individual students but also for the future of the medical profession, as these individuals will shape the healthcare landscape and serve as pillars of their communities.

Limitations:

The study employed a purposive sampling method, which may limit the generalizability of the findings to the broader population of medical students.

The study relied on self-report measures, such as the Internet Addiction Test (IAT), Depression Anxiety Stress Scale (DASS-42), and Rosenberg Self-Esteem Scale (RSES). Self-report measures are susceptible to response biases, social desirability, and subjective interpretations, which may affect the accuracy and reliability of the data collected.

The cross-sectional design of this study limits the ability to establish causal relationships between the variables. Longitudinal or experimental studies could provide more robust insights into the directionality of the observed associations and help identify potential risk factors or protective factors related to internet addiction and mental health outcomes.

Qualitative research methods, such as interviews or focus groups, could complement the quantitative findings by exploring the lived experiences and perspectives of medical students struggling with internet addiction and mental health issues. This approach could offer valuable insights into the underlying motivations, challenges and coping mechanisms employed by students, informing the development of more tailored and effective interventions.

Comparative studies across different medical institutions or regions could explore potential cultural or contextual factors that may influence the prevalence and impact of internet addiction among medical students. Understanding the role of societal norms, educational systems and environmental factors could inform the development of culturally relevant and context-specific interventions.

Future research could incorporate additional variables and explore potential mediating or moderating factors that may influence the relationships observed in this study. For example, investigating the role of coping strategies, social support or academic performance could provide a more comprehensive understanding of the complex interplay between internet addiction, psychopathology and self-esteem.

Delimitations:

The study focused specifically on medical students aged 18-25 years, delimiting the scope of the research to this particular population and age group.

The study was conducted at Santosh Medical College and Hospital in Ghaziabad, Uttar Pradesh, India, delimiting the geographical scope of the research.

The study utilized three specific assessment tools: the Internet Addiction Test (IAT), Depression Anxiety Stress Scale (DASS-42), and Rosenberg Self-Esteem Scale (RSES). The choice of these instruments may have delimited the scope of measurement and the types of information gathered.

The study excluded individuals with psychiatric problems, serious physical illnesses, or disabilities. This delimitation may have narrowed the scope of the research and restricted the generalizability of the findings to specific populations.

The study was grounded in the theoretical framework of internet addiction, psychopathology, and self-esteem, delimiting the scope of investigation to these specific constructs and their relationships.

It is important to acknowledge these limitations and delimitations when interpreting the findings and considering the implications of the study. Future research could address some of these limitations by employing larger and more diverse samples, longitudinal study designs, and incorporating additional measures or variables to provide a more comprehensive understanding of the complex relationships among internet addiction, psychopathological symptoms, and self-esteem in medical students.

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ANNEXURES

ANNEXURE I

SANTOSH

SANTOSH MEDICAL COLLEGE AND HOSPITAL

NO.1 AMBEDKAR ROAD, GHAZIABAD

DEPARTMENT OF CLINICAL PSYCHOLOGY

PRELIMINARY IDENTIFICATION FORM

NOTE: The Performa is being prepared under the research project, titled **"Internet Addiction and its relation to Psychopathology and Self-Esteem among medical students",** you as a participant are requested to furnish certain information to the best of your true knowledge:

Date_____

Personal Details

Name of the Participant (in block letter)

_____

Gender_____

Age of the Participant_____ Marital Status_____

Educational Qualification_____

Occupation_____

Religion _____

Address_____

Contact no_____

Family History

Does family have the history of mental illness _____

Type of family (nuclear/joint) _____

Environment/Relationship of family (cordial/In cordial) _____

Participants' relation with Father_____ Mother_____

Wife_____Children_____& Others_____

Any problem (in past/in present)

a. At physical level

_____

a. At psychological level

_____

Any other information (personal/ family level) if you want to mention.

_____

_____

Behavioral Observation

_____

_____

Test Administered

_____

_____

Test Findings

_____

_____

Recommendations

1._____

2._____

NOTE: It's an oath that whatever information you are mentioning here will be kept confidential.

ANNEXURE II

SANTOSH MEDICAL COLLEGE, HOSPITALS

No.1, AMBEDKAR ROAD, GHAZIABAD, U.P, 201001

DEPARTMENT OF CLINICAL PSYCHOLOGY

CONSENT FORM

Date_____

Name_____ Age_____

Address_____ Mobile no_____

This study focus is to know Internet addiction and its relation with psychopathology and self-esteem among medical students.

Your willingness for the participation in this study is essential. It will take approximately thirty minutes to complete the Performa.

We will not in any way pressure you into doing this work; once you begin the test, you are free to stop at any time if you are not willing to complete it. The numerous investigators guarantee that our information will remain private. This assessment is free of cost or fees.

THUS IT IS EXPECTED THAT YOU ARE WILLING TO COME FORWARD FOR THE SAID STUDY

Signature_____

INVESTIGATORS:

Miss Shilpa (MSc. Clinical Psychology, Santosh Medical College and Hospital, Ghaziabad)

Dr. Niharika Arora (Assistant Professor Dept. of Clinical Psychology, Santosh Medical College and Hospital, Ghaziabad)

Dr. Parul Gairola (Assistant Professor Dept. of Clinical Psychology, Santosh Medical College and Hospital, Ghaziabad)

ANNEXURE III

संतोश मेडिकल कॉलेज,
अस्पताल

नंबर. 1, अंबेडकर रोड, गाडजयाबाद, उत्तर प्रदेश, 201001

नैदानिक मनोविज्ञान
विभाग

सहमडत पत्र

डदनांक_____

नाम_____ उम्र_____

पता_____ मोबाइल नबर_ _

इस अध्ययन का उद्देश्य इंटरनेट की लत और चिकत्सा छात्रों के बीच मनोरोग विज्ञान और आत्मसम्मान के साथ इसके संबंध को जानने पर केंद्रित है।

आपकी सहमचत इस अध्ययन मेंं भागीदारी करने के ललए महत्वपूर्ण है। इसमे अचधकतम आपको 30 चमनट का समय लगेगा । हम चकसी भी तरह से इस काम को करने के ललए आप पर दबाव नहीं डालेंगे; एक बार जाँच शुरू करने के
बाद, यचद आप इसे पूरा करने के चलए तैयार नहीं हैं, तो आप चकसी भी समय रुकने के ललए स्वतंत्र हैं।

आपसे जो भी जानकारी प्राप्त की जाएगी उसे पूर्त गुप्त रखा जाएगा और इस अध्ययन के चलए ही प्रयोग चकया जाएगा। आपसे आशा है चक आप अपनी इच्छा से इस अध्ययन मेंं पूर्ण रूप से अपना सहयोग प्रदान करेंगे।

हस्ताक्षर_____

चनररक्षर् कता

चमस चशल्पा (एमएससी नैदाचनक मनोचवज्ञान चवभाग, संतोष मेचडकल कॉलेज और अस्पताल, गाचजयाबाद)

डॉ. चनहाररका अरोडा (सहायक प्रोफे सर, नैदाचनक मनोचिज्ञान चिभाग, संतोष मेचडकल कॉलेज और अस्पताल,गाचजयाबाद)

डॉ. पारुल गैरोला (सहायक प्रोफे सर, नैदाचनक मनोचवज्ञान चवभाग, संतोष मेचडकल कॉलेज और अस्पताल,गाचजयाबाद)

ANNEXURE IV

INTERNET ADDICTION TEST

Name_____
Male_____Female _____
Age_____Years Online _____ Do you use the Internet for work?_____Yes_____No

This questionnaire consists of 20 statements. After reading each statement carefully, based upon the 5-point Likert scale, please select the response (0, 1, 2, 3, 4 or 5) which best describes you. If two choices seem to apply equally well, circle the choice that best represents how you are most of the time during the past month. Be sure to read all the statements carefully before making your choice. The statements refer to offline situations or actions unless otherwise specified.

0 = Not Applicable
1 = Rarely
2 = Occasionally
3 = Frequently
4 = Often
5 = Always

1. ___How often do you find that you stay online longer than you intended?
2. ___How often do you neglect household chores to spend more time online?
3. ___How often do you prefer the excitement of the Internet to intimacy with your partner?
4. ___How often do you form new relationships with fellow online users?
5. ___How often do others in your life complain to you about the amount of time you spend online?
6. ___How often do your grades or school work suffer because of the amount of time you spend online?
7. ___How often do you check your email before something else that you need to do?
8. ___How often does your job performance or productivity suffer because of the Internet?
9. ___How often do you become defensive or secretive when anyone asks you what you do online?
10. ___How often do you block out disturbing thoughts about your life with soothing thoughts of the Internet?
11. ___How often do you find yourself anticipating when you will go online again?
12. ___How often do you fear that life without the Internet would be boring, empty, and joyless?
13. ___How often do you snap, yell, or act annoyed if someone bothers you while you are online?
14. ___How often do you lose sleep due to being online?
15. ___How often do you feel preoccupied with the Internet when off-line, or fantasize about being online?
16. ___How often do you find yourself saying "just a few more minutes" when online?
17. ___How often do you try to cut down the amount of time you spend online and fail?
18. ___How often do you try to hide how long you've been online?
19. ___How often do you choose to spend more time online over going out with others?
20. ___How often do you feel depressed, moody, or nervous when you are off-line, which goes away once you are back online?

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ANNEXURE V

D = A = S Reset Save Print

DASS

Name: Date: DD/MM/YYYY

Please read each statement and circle a number 0, 1, 2 or 3 which indicates how much the statement applied to you *over the past week*. There are no right or wrong answers. Do not spend too much time on any statement.

The rating scale is as follows:

0 Did not apply to me at all
1 Applied to me to some degree, or some of the time
2 Applied to me to a considerable degree, or a good part of time
3 Applied to me very much, or most of the time

1	I found myself getting upset by quite trivial things	0
2	I was aware of dryness of my mouth	0
3	I couldn't seem to experience any positive feeling at all	0
4	I experienced breathing difficulty (eg, excessively rapid breathing, breathlessness in the absence of physical exertion)	0
5	I just couldn't seem to get going	0
6	I tended to over-react to situations	0
7	I had a feeling of shakiness (eg, legs going to give way)	0
8	I found it difficult to relax	0
9	I found myself in situations that made me so anxious I was most relieved when they ended	0
10	I felt that I had nothing to look forward to	0
11	I found myself getting upset rather easily	0
12	I felt that I was using a lot of nervous energy	0
13	I felt sad and depressed	0
14	I found myself getting impatient when I was delayed in any way (eg, lifts, traffic lights, being kept waiting)	0
15	I had a feeling of faintness	0
16	I felt that I had lost interest in just about everything	0
17	I felt I wasn't worth much as a person	0
18	I felt that I was rather touchy	0
19	I perspired noticeably (eg, hands sweaty) in the absence of high temperatures or physical exertion	0
20	I felt scared without any good reason	0
21	I felt that life wasn't worthwhile	0

Please turn the page ☞

Lovibond, S.H. & Lovibond, P.F. (1995). Manual for the Depression Anxiety Stress Scales (2nd. Ed.). Sydney: Psychology Foundation.

Reminder of rating scale:

0 Did not apply to me at all
1 Applied to me to some degree, or some of the time
2 Applied to me to a considerable degree, or a good part of time
3 Applied to me very much, or most of the time

22	I found it hard to wind down	0
23	I had difficulty in swallowing	0
24	I couldn't seem to get any enjoyment out of the things I did	0
25	I was aware of the action of my heart in the absence of physical exertion (eg, sense of heart rate increase, heart missing a beat)	0
26	I felt down-hearted and blue	0
27	I found that I was very irritable	0
28	I felt I was close to panic	0
29	I found it hard to calm down after something upset me	0
30	I feared that I would be "thrown" by some trivial but unfamiliar task	0
31	I was unable to become enthusiastic about anything	0
32	I found it difficult to tolerate interruptions to what I was doing	0
33	I was in a state of nervous tension	0
34	I felt I was pretty worthless	0
35	I was intolerant of anything that kept me from getting on with what I was doing	0
36	I felt terrified	0
37	I could see nothing in the future to be hopeful about	0
38	I felt that life was meaningless	0
39	I found myself getting agitated	0
40	I was worried about situations in which I might panic and make a fool of myself	0
41	I experienced trembling (eg, in the hands)	0
42	I found it difficult to work up the initiative to do things	0

Lovibond, S.H. & Lovibond, P.F. (1995). Manual for the Depression Anxiety Stress Scales (2nd. Ed.). Sydney: Psychology Foundation.

ANNEXURE VI

RSE

Please record the appropriate answer for each item, depending on whether you Strongly agree, agree, disagree, or strongly disagree with it.

1 = Strongly agree
2 = Agree
3 = Disagree
4 = Strongly disagree

_____ 1. On the whole, I am satisfied with myself.

_____ 2. At times I think I am no good at all.

_____ 3. I feel that I have a number of good qualities.

_____ 4. I am able to do things as well as most other people.

_____ 5. I feel 1do not have much to be proud of.

_____ 6. I certainly feel useless at times.

_____ 7. I feel that I'm a person of worth.

_____ 8. I wish I could have more respect for myself.

_____ 9. All in all, I am inclined to think that I am a failure.

_____ 10. I take a positive attitude toward myself.

Revised date (4 October 2006)

STATISTICIAN CERTIFICATE

This is to certify that the statistical analysis component of the thesis titled "**Internet Addiction and its relation to Psychopathology and Self-Esteem among Medical students**", done by **Shilpa** in the **Department of Clinical Psychology,** Santosh Medical College and Hospital, Ghaziabad has been conducted under my direct guidance and supervision. All the statistical calculations of this study re authentic and correct to the best of my knowledge.

Wish her all the success in his life.

Assistant Professor cum Statistician

Santosh Deemed To be University,

Ghaziabad

INTERNET ADDICTION AND ITS RELATION TO PSYCHOPATHOLOGY AND SELF-ESTEEM AMONG MEDICAL STUDENTS

ORIGINALITY REPORT

3%
SIMILARITY INDEX

PRIMARY SOURCES

1	www.ijnrd.org Internet	50 words — 1%
2	www.ijfmr.com Internet	32 words — < 1%
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SANTOSH
Deemed to be University
(Established u/s 3 of the UGC Act, 1956)

F. No. SU/R/2024/1344[44] Dated: 17.05.2024

Subject: Grant of Ethical Clearance for **Dissertation Protocol** Topic **"Internet Addiction and Its Relation to Psychopathological and Self Esteem",** submitted by **SHILPA,** student of M.Sc CLINICAL PSYCHOLOGY, 2022 Batch.

*****

With reference to the request for grant of Ethical Clearance for the Dissertation Protocol entitled **"Internet Addiction and Its Relation to Psychopathological and Self Esteem"**, **SHILPA** is informed that the **Dissertation Protocol** submitted by him/her was considered by the **Screening Committee** of the **Allied Health Sciences** in its meetings held on 07.02.2024 and 29.02.2024. The recommendations of the **Screening Committee** were considered in detail by the **Institutional Ethics Committee** in its meeting held on **15.05.2024** and the same was **approved** by the **Ethics Committee** of the **Santosh Deemed to be University, Ghaziabad, Delhi NCR.**

He /She is informed accordingly for further necessary action.

17/5/24

[Dr. EZHILRAJAN. K]
REGISTRAR

SANTOSH DEEMED TO BE UNIVERSITY REGISTRAR GHAZIABAD, NCR DELHI

SHILPA
M.Sc CLINICAL PSYCHOLOGY.

Copy to:

1. The Vice Chancellor
2. The Dean – Academics
3. The Dean, SMC&H
4. The Dean – Research
5. The Director - IQAC
6. HOD/ Course In-charge of the concerned Department.

MASTER CHART

S.No.	Name	Age	Gender	Address	Marital Status	Religion	Internet Addiction	IA Range	Depression	D Range	Anxiety	A Range	Stress	S Range	RSE	RSE Range
1	Kalpana	23	Female	Delhi	Unmarried	Hindu	39	Mild	14	Moderate	13	Moderate	13	Normal	21	Normal
2	Jugnoo	24	Female	Bhanjanpura	Unmarried	Muslim	39	Mild	14	Moderate	8	Mild	13	Normal	21	Normal
3	Sweety	19	Female	Lalkuan	Unmarried	Hindu	12	Normal	15	Moderate	11	Moderate	14	Mild	16	Normal
4	karishma	22	Female	Ghaziabad	Unmarried	Hindu	26	Normal	3	Normal	8	Normal	4	Normal	24	Normal
5	Somya	20	Female	Agra	Unmarried	Hindu	25	Normal	2	Normal	0	Normal	8	Normal	18	Normal
6	Radhika	25	Female	Ghaziabad	Unmarried	Hindu	81	Severe	14	m	13	Moderate	13	Normal	13	Low
7	Bharul	20	Female	Ghaziabad	Unmarried	Hindu	40	Mild	16	Moderate	17	Severe	24	Moderate	11	Low
8	Garima	21	Female	Badarpur	Unmarried	Hindu	35	Mild	18	Moderate	10	Moderate	11	Normal	22	Normal
9	Mitali	22	Female	Pratap Vihar	Unmarried	Hindu	40	Mild	21	Severe	17	Severe	14	Normal	18	Normal
10	Meenu	24	Female	Greater Noida	Unmarried	Hindu	38	Mild	4	Normal	5	Normal	9	Normal	23	Normal
11	Babita	23	Female	Vaishali	Unmarried	Hindu	27	Normal	6	Normal	5	Normal	7	Normal	16	Normal
12	Shruti	23	Female	DLF Capital Greens	Unmarried	Hindu	50	Moderate	0	Normal	0	Normal	0	Normal	19	Normal
13	Harshita	19	Female	Ghaziabad	Unmarried	Hindu	40	Mild	15	Moderate	11	Moderate	28	Severe	19	Normal
14	Kajol	25	Female	Greater Noida	Unmarried	Hindu	56	Moderate	20	Moderate	26	Extremely Severe	29	Severe	10	Normal
15	Bhawna	25	Female	Ghaziabad	Unmarried	Hindu	29	Normal	4	Normal	2	Normal	7	Normal	25	Normal
16	Shakeena	20	Female	Islam Nagar	Unmarried	Muslim	66	Moderate	20	Moderate	16	Severe	9	Normal	19	Normal
17	Jessica	21	Female	Vijay Nagar	Unmarried	Hindu	79	Moderate	25	Severe	19	Severe	34	Extremely Severe	21	Normal
18	Himanshi	19	Female	Haryana	Unmarried	Hindu	33	Mild	18	Moderate	11	Moderate	12	Normal	15	Normal
19	Kriti	21	Female	Noida	Unmarried	Hindu	59	Moderate	20	Moderate	23	Extremely Severe	26	Severe	18	Normal
20	Sona	19	Female	Khurja	Unmarried	Hindu	66	Moderate	25	Severe	17	Severe	17	Mild	20	Normal
21	Kanishka	20	Female	Mohan Nagar	Unmarried	Hindu	25	Normal	23	Severe	16	Severe	12	Normal	21	Normal
22	Pragya	24	Female	Vasundhara	Unmarried	Hindu	15	Normal	0	Normal	2	Normal	2	Normal	27	High
23	Sejal	22	Female	Ghaziabad	Unmarried	Hindu	27	Normal	2	Normal	12	Moderate	4	Normal	22	Normal
24	Radhika	19	Female	Mukherji Nagar	Unmarried	Hindu	45	Mild	13	Mild	14	Moderate	17	Mild	14	Low
25	Jiya	21	Female	Ghaziabad	Unmarried	Hindu	10	Normal	23	Severe	30	Extremely Severe	30	Extremely Severe	28	High
26	Anjum	21	Female	Hindon Vihar	Unmarried	Muslim	49	Mild	21	Severe	31	Extremely Severe	14	Normal	20	Normal
27	Meenakshi	21	Female	Vijay Nagar	Unmarried	Hindu	43	Mild	6	Normal	5	Normal	5	Normal	13	Low
28	Aditi	20	Female	Gorakhpur	Unmarried	Hindu	44	Mild	15	Moderate	17	Severe	25	Moderate	22	Normal
29	Mahenoor	21	Female	Noida	Unmarried	Muslim	46	Mild	15	Moderate	5	Severe	14	Normal	17	Normal
30	Deepa	23	Female	Ghaziabad	Unmarried	Hindu	37	Mild	3	Normal	6	Normal	4	Normal	14	Low
31	Archita	20	Female	Krishna nagar	Unmarried	Hindu	56	Moderate	24	Severe	16	Severe	25	Moderate	10	Low
32	Shikha	19	Female	Rajnagar ext	Unmarried	Hindu	39	Mild	4	Normal	10	Moderate	18	Mild	18	Normal
33	Mesha	19	Female	Pratap Vihar	Unmarried	Hindu	19	Normal	3	Normal	2	Normal	5	Normal	23	Normal
34	Neha	22	Female	Mayur Vihar	Unmarried	Hindu	44	Mild	17	Moderate	19	Severe	19	Moderate	17	Normal
35	Pallavi	20	Female	Bulandshehar	Unmarried	Hindu	36	Mild	12	Mild	16	Severe	14	Normal	22	Normal
36	Tanu	19	Female	Muradnagar	Unmarried	Hindu	8	Normal	0	Normal	1	Normal	1	Normal	20	Normal
37	Khushi	24	Female	Ghaziabad	Unmarried	Hindu	50	Moderate	11	Mild	16	Severe	19	Moderate	26	High
38	Akhila	23	Female	Krishna nagar	Unmarried	Hindu	14	Normal	2	Normal	3	Normal	5	Normal	18	Normal
39	Monika	19	Female	Pratap Vihar	Unmarried	Sikh	34	Mild	17	Moderate	15	Severe	21	Moderate	21	Normal
40	Madhu	20	Female	Hindon	Unmarried	Hindu	9	Normal	3	Normal	3	Normal	1	Normal	20	Normal
41	Shalini	21	Female	Govindpuram	Unmarried	Hindu	54	Moderate	6	Normal	4	Normal	6	Normal	17	Normal
42	Simran	21	Female	Shahdara	Unmarried	Hindu	58	Moderate	22	Severe	22	Extremely Severe	21	Moderate	14	Low
43	Khushi	20	Female	Agra	Unmarried	Hindu	57	Moderate	24	Severe	20	Extremely Severe	23	Moderate	12	Normal
44	Radhika	20	Female	Pratap Vihar	Unmarried	Hindu	15	Normal	20	Moderate	29	Extremely Severe	21	Moderate	14	Low
45	Karishma	21	Female	Lalkuan	Unmarried	Hindu	25	Normal	33	Extremely Severe	32	Extremely Severe	33	Extremely Severe	18	Normal
46	Noor	22	Female	Sanjay Nagar	Unmarried	Muslim	33	Mild	4	Normal	5	Normal	7	Normal	26	High
47	Chanchal	22	Female	Ghaziabad	Unmarried	Hindu	75	Moderate	34	Extremely Severe	24	Extremely Severe	25	Severe	17	Normal
48	Sonia	23	Female	Delhi	Unmarried	Hindu	23	Normal	15	Moderate	14	Moderate	15	Mild	15	Normal
49	Jaspreet	20	Female	Baharampur	Unmarried	Sikh	41	Mild	14	Moderate	21	Extremely Severe	22	Moderate	19	Normal
50	Avantika	23	Female	Uttam Nagar	Unmarried	Hindu	69	Moderate	26	Severe	28	Extremely Severe	28	Severe	15	Normal
51	Deepa	22	Female	Govindpuram	Unmarried	Hindu	71	Moderate	22	Severe	23	Extremely Severe	18	Mild	14	Low
52	Shubhanshi	22	Female	Krishna nagar	Unmarried	Hindu	24	Normal	0	Normal	4	Normal	15	Mild	16	Normal
53	Preeti	21	Female	Pratap Vihar	Unmarried	Hindu	20	Normal	0	Normal	0	Normal	0	Normal	19	Normal
54	Parul	22	Female	Dilshad Garden	Unmarried	Hindu	25	Normal	7	Normal	7	Normal	9	Normal	17	Normal
55	Laiba	24	Female	Delhi	Unmarried	Muslim	23	Normal	6	Normal	9	Normal	9	Normal	15	Normal
56	Bhavna	19	Female	Vijay Nagar	Unmarried	Hindu	27	Normal	1	Normal	4	Normal	7	Normal	16	Normal
57	Manisha	22	Female	Ghaziabad		Hindu	56	Moderate	25	Severe	29	Extremely Severe	28	Severe	11	Low
58	Mehak	24	Female	Surya Nagar	Unmarried	Hindu	42	Mild	4	Normal	1	Normal	12	Normal	17	Normal
59	Muskan	24	Female	Rajnagar ext	Unmarried	Hindu	29	Normal	2	Normal	2	Normal	4	Normal	21	Normal
60	Christina	23	Female	Ghaziabad	Unmarried	Christian	35	Mild	14	Moderate	8	Mild	15	Mild	14	Low
61	Truphina	20	Female	Ghaziabad	Unmarried	Christian	39	Mild	21	Severe	9	Mild	19	Moderate	13	Low
62	Dewanshi	21	Female	Ghaziabad	Unmarried	Hindu	55	Moderate	11	Mild	11	Moderate	26	Severe	15	Normal
63	Bansilona	22	Female	Shillong	Unmarried	Christian	51	Moderate	15	Severe	15	Severe	13	Normal	11	Low
64	Patricia	21	Female	Assam	Unmarried	Christian	59	Moderate	12	Mild	13	Moderate	17	Mild	26	High
65	Aditi	20	Female	Ghaziabad	Unmarried	Hindu	36	Mild	12	Mild	7	Normal	20	Moderate	14	Low
66	Tanya	20	Female	Ghaziabad	Unmarried	Hindu	38	Mild	16	Moderate	13	Moderate	24	Moderate	17	Normal
67	Shanu	24	Female	Delhi	Unmarried	Hindu	82	Severe	18	Moderate	8	Mild	19	Moderate	15	Normal
68	Saya	24	Female	Delhi	Unmarried	Hindu	35	Mild	5	Normal	9	Mild	15	Mild	18	Normal
69	Namisha	25	Female	Delhi	Unmarried	Hindu	44	Mild	11	Mild	11	Moderate	16	Mild	20	Normal
70	Nikita	25	Female	Delhi	Unmarried	Hindu	57	Moderate	12	Mild	7	Normal	17	Mild	14	Low
71	Menaka	23	Female	Delhi	Unmarried	Hindu	58	Moderate	12	Mild	7	Normal	14	Normal	19	Normal
72	Lucky	23	Female	Delhi	Unmarried	Hindu	29	Mild	16	Moderate	9	Mild	27	Severe	27	High
73	Ruhi	24	Female	Delhi	Unmarried	Hindu	34	Mild	7	Normal	16	Severe	13	Normal	11	Low
74	Siya	24	Female	Delhi	Unmarried	Hindu	29	Normal	8	Normal	5	Normal	20	Moderate	16	Normal
75	Laxmi	25	Female	Delhi	Unmarried	Hindu	25	Mild	15	Moderate	11	Moderate	17	Mild	17	Normal
76	Aakash	21	Male	Ghaziabad	Unmarried	Hindu	43	Mild	27	Severe	29	Extremely Severe	26	Severe	18	Normal
77	Aryan	25	Male	Kanpur	Unmarried	Hindu	35	Mild	28	Extremely Severe	25	Extremely Severe	26	Severe	14	Low
78	Deepanshu	21	Male	Ghaziabad	Unmarried	Hindu	46	Mild	18	Moderate	22	Extremely Severe	22	Moderate	14	Low
79	Sachinpal	25	Male	Rajnagar ext	Unmarried	Sikh	25	Normal	0	Normal	0	Normal	3	Normal	24	Normal
80	Aman	21	Male	Delhi	Unmarried	Hindu	52	Moderate	24	Severe	27	Extremely Severe	27	Severe	13	Low
81	Shaksham	25	Male	Rajnagar ext	Unmarried	Hindu	29	Normal	7	Normal	12	Moderate	16	Mild	21	Normal
82	Rishabh	24	Male	Patel Nagar	Unmarried	Hindu	31	Mild	17	Moderate	13	Moderate	10	Normal	20	Normal
83	Dev	20	Male	Dhampur	Unmarried	Hindu	68	Moderate	22	Severe	20	Extremely Severe	22	Moderate	20	Normal
84	Divakar	24	Male	Pratap Vihar	Unmarried	Hindu	27	Normal	18	Moderate	15	Severe	16	Mild	16	Normal
85	Dhruv	19	Male	Greater Kailash	Unmarried	Hindu	57	Moderate	4	Normal	7	Normal	13	Normal	19	Normal
86	Prashant	24	Male	Ghaziabad	Unmarried	Hindu	24	Normal	1	Normal	0	Normal	0	Normal	15	Normal
87	Sourabh	25	Male	Delhi	Unmarried	Hindu	70	Moderate	27	Severe	28	Extremely Severe	28	Severe	16	Normal
88	Chandrajeet	25	Male	Maliwara	Unmarried	Hindu	27	Normal	24	Severe	23	Extremely Severe	17	Mild	17	Normal
89	Prabhkirat	19	Male	Rajnagar ext	Unmarried	Sikh	48	Mild	14	Moderate	12	Moderate	16	Mild	17	Normal
90	Mohsin	25	Male	Delhi	Unmarried	Muslim	44	Mild	8	Normal	2	Normal	6	Normal	21	Normal
91	Nehal	21	Male	Rajnagar ext	Unmarried	Hindu	16	Normal	0	Normal	1	Normal	4	Normal	24	Normal
92	Govind	25	Male	Noida	Unmarried	Hindu	62	Moderate	10	Mild	5	Normal	15	Mild	26	High

93	Shubham	23	Male	Delhi	Unmarried	Hindu	23	Normal	3	Normal	3	Normal	2	Normal	25	Normal
94	Sourabh	23	Male	Delhi	Unmarried	Hindu	11	Normal	0	Normal	0	Normal	0	Normal	22	Normal
95	Samir	24	Male	Delhi	Unmarried	Muslim	8	Normal	0	Normal	0	Normal	0	Normal	30	High
96	Ekagra	20	Male	Greater Kailash	Unmarried		64	Moderate	6	Normal	5	Normal	5	Normal	19	Normal
97	Arshdeep	24	Male	Patiala	Unmarried	Sikh	25	Normal	9	Normal	9	Mild	10	Normal	25	Normal
98	Arin	23	Male	Ashoka Road	Unmarried	Hindu	36	Mild	2	Normal	9	Mild	15	Mild	19	Normal
99	Abhay	25	Male	Ghaziabad	Unmarried	Atheist	8	Normal	8	Normal	0	Normal	4	Normal	25	Normal
100	Prabhudeep	25	Male	Prateek City	Unmarried	Sikh	46	Mild	12	Mild	17	Severe	21	Moderate	25	Normal
101	Naiyar	22	Male	Sitamarhi	Unmarried	Muslim	44	Mild	14	Moderate	7	Normal	15	Mild	27	High
102	Lalit	24	Male	Ghaziabad	Unmarried	Hindu	81	Severe	34	Extremely Severe	35	Extremely Severe	34	Extremely Severe	15	Normal
103	Harsh	20	Male	Shastri Nagar	Unmarried	Hindu	35	Mild	20	Severe	16	Severe	23	Moderate	19	Normal
104	Nishant	25	Male	Ghaziabad	Unmarried	Hindu	82	Severe	32	Extremely Severe	34	Extremely Severe	35	Extremely Severe	19	Normal
105	Anmol	23	Male	Ghaziabad	Unmarried	Hindu	43	Mild	25	Severe	19	Severe	26	Severe	14	Low
106	Manish	25	Male	Ghaziabad	Unmarried	Hindu	31	Mild	4	Normal	6	Normal	8	Normal	30	High
107	Abhinav	24	Male	Mayur Vihar	Unmarried	Hindu	30	Normal	13	Mild	13	Moderate	7	Normal	13	Low
108	Krishna	25	Male	Pratap Vihar	Unmarried	Hindu	14	Normal	8	Normal	7	Normal	5	Normal	18	Normal
109	Ayush	21	Male	Rahul Vihar	Unmarried	Hindu	38	Mild	5	Normal	5	Normal	7	Normal	20	Normal
110	Jitendra	19	Male	Noida	Unmarried	Hindu	59	Moderate	0	Normal	0	Normal	0	Normal	15	Normal
111	Shiven	19	Male	Indirapuram	Unmarried	Hindu	30	Mild	13	Mild	14	Moderate	18	Mild	18	Normal
112	Shivansh	20	Male	Raj Nagar	Unmarried	Hindu	29	Normal	2	Normal	5	Normal	1	Normal	23	Normal
113	Saurav	19	Male	Pratap Vihar	Unmarried	Hindu	30	Normal	5	Normal	4	Normal	11	Normal	19	Normal
114	Al Noor Haq	23	Male	Sidharth Vihar	Married	Muslim	26	Normal	7	Normal	8	Mild	5	Normal	27	High
115	Aditya	19	Male	Pratap Vihar	Unmarried	Hindu	48	Mild	13	Mild	18	Severe	15	Mild	25	Normal
116	Nitin	23	Male	Noida	Unmarried	Hindu	70	Moderate	29	Extremely Severe	35	Extremely Severe	32	Severe	22	Normal
117	Shivam	25	Male	Rajnagar ext	Unmarried	Hindu	23	Normal	3	Normal	5	Normal	6	Normal	27	High
118	Swapnil	25	Male	Ghaziabad	Unmarried	Hindu	39	Mild	2	Normal	1	Normal	5	Normal	28	High
119	Abhinav	24	Male	Delhi	Unmarried	Hindu	36	Mild	18	Moderate	16	Severe	17	Mild	17	Normal
120	Preet	19	Male	Ghaziabad	Unmarried	Hindu	49	Mild	25	Severe	19	Severe	31	Severe	17	Normal
121	Subhash	23	Male	Ghaziabad	Unmarried	Hindu	61	Moderate	34	Extremely Severe	30	Extremely Severe	31	Severe	22	Normal
122	Vivek	19	Male	Govindpuram	Unmarried	Hindu	29	Normal	17	Moderate	21	Extremely Severe	16	Mild	17	Normal
123	Vikash	24	Male	Ghaziabad	Unmarried	Hindu	65	Moderate	34	Extremely Severe	22	Extremely Severe	39	Extremely Severe	12	Low
124	Aman	21	Male	Gaur City	Unmarried	Hindu	44	Mild	4	Normal	6	Normal	6	Normal	13	Low
125	Manish	25	Male	Ghaziabad	Unmarried	Hindu	31	Mild	4	Normal	6	Normal	8	Normal	30	High
126	Nishi	23	Male	Delhi	Unmarried	Hindu	39	Mild	23	Severe	21	Extremely Severe	20	Moderate	23	Normal
127	Rajeev	25	Male	Varanasi	Unmarried	Hindu	33	Mild	10	Mild	8	Mild	8	Normal	17	Normal
128	Kundan	23	Male	Pratap Vihar	Unmarried	Hindu	29	Normal	2	Normal	6	Normal	12	Normal	27	Normal
129	Samual	24	Male	Ghaziabad	Unmarried	Hindu	68	Moderate	33	Extremely Severe	33	Extremely Severe	35	Extremely Severe	23	Normal
130	Abhinav	24	Male	Mayur Vihar	Unmarried	Hindu	30	Normal	13	Mild	13	Moderate	7	Normal	13	Low
131	Vishal	21	Male	Pratap Vihar	Unmarried	Hindu	70	Moderate	18	Moderate	15	Severe	21	Moderate	23	Normal
132	Ata	21	Male	Dasna	Unmarried	Muslim	38	Mild	13	Mild	16	Severe	11	Normal	18	Normal
133	Ashwini	25	Male	Noida	Unmarried	Hindu	51	Moderate	3	Normal	2	Normal	6	Normal	25	Normal
134	Madhvesh	21	Male	Mumbai	Unmarried	Hindu	34	Mild	3	Normal	3	Normal	6	Normal	18	Normal
135	Gagandeep	20	Male	Sidharth Vihar	Unmarried	Sikh	38	Mild	0	Normal	0	Normal	0	Normal	28	High
136	Kshitiz	19	Male	Ghaziabad	Unmarried	Hindu	42	Mild	0	Normal	1	Normal	0	Normal	28	High
137	Pratyun	22	Male	Rohini	Unmarried	Hindu	18	Normal	0	Normal	3	Normal	0	Normal	24	Normal
138	Ayush	24	Male	Janakpuri	Unmarried	Hindu	51	Moderate	18	Moderate	17	Severe	26	Severe	18	Normal
139	Jai	25	Male	Ghaziabad	Unmarried	Hindu	32	Mild	6	Normal	4	Normal	7	Normal	18	Normal
140	Bhavesh	25	Male	New Delhi	Unmarried	Hindu	44	Mild	16	Moderate	16	Severe	12	Normal	26	High
141	Sameer	21	Male	Ghaziabad	Unmarried	Muslim	29	Normal	14	Moderate	12	Moderate	13	Normal	17	Normal
142	Dum	21	Male	Ghaziabad	Unmarried	Christian	35	Mild	13	Mild	7	Normal	20	Moderate	13	Low
143	Wan	21	Male	Sylhet	Unmarried	Christian	38	Mild	9	Normal	9	Mild	26	Severe	11	Low
144	Aman	25	Male	Delhi	Unmarried	Hindu	55	Moderate	20	Moderate	8	Mild	27	Severe	15	Normal
145	Pritam	25	Male	Ghaziabad	Unmarried	Hindu	59	Moderate	15	Moderate	14	Moderate	17	Mild	10	Low
146	Lalit	25	Male	Ghaziabad	Unmarried	Hindu	75	Moderate	16	Moderate	11	Moderate	18	Mild	26	High
147	Karan	24	Male	Delhi	Unmarried	Hindu	66	Moderate	11	Mild	6	Normal	13	Normal	15	Normal
148	Himanshu	25	Male	Delhi	Unmarried	Hindu	65	Moderate	19	Moderate	9	Mild	24	Severe	19	Normal
149	Vineet	24	Male	Delhi	Unmarried	Hindu	42	Mild	26	Severe	13	Moderate	23	Moderate	21	Normal
150	Shubham	24	Male	Delhi	Unmarried	Hindu	44	Mild	10	Mild	13	Moderate	20	Moderate	14	Low